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14. ABSTRACT

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JOINT HELICOPTER COMMAND: THE 'PURPLE' EVOLUTION OF ROTARY-WING AVIATION

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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23 October 2006

Abstract

The role of rotary-wing forces in operational maneuver over land, over water, and in the littoral is a critical enabling capability in current and evolving U.S. doctrine. The helicopter is ubiquitous, but joint helicopter operational doctrine, operating and maintenance procedures are not. Individual service cultures cultivate helicopter operating concepts that perpetuate intra-service relevance, but do not leverage the role of rotary-wing aviation in an integrated approach to joint warfighting. This paper examines the role of the United Kingdom's Joint Helicopter Command (JHC) in transforming Britain's ability to deliver effective combat helicopter forces to the Joint Commander. It illustrates how the JHC architecture supports effects based operations through an integrated joint approach to doctrine, infrastructure, training support and supportability across the Services. Finally, based on an established requirement to continue integration of U.S. helicopter forces, the paper suggests a U.S. Joint Rotary-Wing Command concept, prototyped on the JHC.

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Introduction

April, 2006 - Joint Special Operations Air Detachment - Arabian Peninsula (JSOAD-AP). A SOF helicopter assault force departs from an undisclosed FOB executing a joint-coalition Direct Action mission. Actionable intelligence has identified and located a prominent international terrorist and prominent figure in the Iraqi insurgency. Launched under the cover of darkness, the eleven-aircraft package includes U.S. Navy, Army and Air Force helicopters. Likewise, the commando package is comprised of U.S. Navy, Air Force and Army SOF elements integrated with Iraqi SOF troops.

This narrative portrays the pinnacle of current joint warfighting doctrine envisioned in the Goldwater-Nichols Act: three service components operating in coordination with coalition partners to engage and defeat the enemy. However, the image is misleading. Behind the veneer of joint interoperability, the JSOAD represents a microcosm of individual service cultures. Each helicopter element is uniquely trained and equipped by its parent service. Despite the patina of overarching joint doctrine, service-centric Training, Tactics and Procedures (TTP) direct how pilots and aircrews fly and fight their aircraft. Service capabilities, indoctrinated in isolation, influence every aspect of the 'joint' detachment from aircraft materiel readiness standards to unique aircrew qualification and currency practices. While conceptually similar, service institutions force the units to function as individual elements of a combined, but not wholly integrated team. Further, service procurement practices have produced common helicopter platforms (H-60) outfitted with dissimilar and in some cases incompatible equipment. Despite ten years of Goldwater-Nichols, the essential tenets of 'jointness' have yet to permeate service doctrine to achieve genuine joint interoperability.

Prior to 1986, service components procured resources, developed doctrine and trained forces to meet service defined objectives in support of wartime activities which were planned

and executed independently.[1] The resulting practical application often produced inefficient massing of forces, discontinuity of effort, seams in force capability, and a lack of sound joint warfighting doctrine. These inefficiencies were targeted by the Goldwater-Nichols Act. By restructuring functional service relationships, Goldwater-Nichols sought to produce synergy through integrated planning and procurement processes and development of enduring joint doctrinal concepts. Yet a decade later, the services are still handicapped by many of the same organizational obstacles that Goldwater-Nichols sought to eliminate. With rare exception, they continue to organize, train and equip forces to fight within traditional service culture niches.

Current service-specific equipment, training and deployment paradigms have led to inefficient duplication of effort and resources without a parallel increase in redundant capabilities. Further, service oriented models for helicopter force employment inadequately meet combatant commander's requirements in the rapidly changing pace of 21st century warfare. All U.S. rotary-wing aviation should be consolidated under a singe joint command structure in order to enhance integrated joint capabilities and operational effectiveness across the Range of Military Operations.[2]

The recent success realized by the United Kingdom's Joint Helicopter Command (JHC) provides a contemporary blueprint for developing a similarly organized U.S. institution. Despite obvious differences in force size and service organization, the British JHC presents an architectural basis which has been validated in combat and has survived the scrutinizing analysis of British Ministry of Defence regulatory and oversight bodies. This

[1] "National Defense University Library." Goldwater Nichols Department of Defense Reorganization Act of 1986. National Defense University. <http://www.ndu.edu/library/goldnich/goldnich.html>.
[2] As described, "rotary-wing aviation" includes the tilt-wing MV-22 Osprey, in addition to all military and commercial helicopters.

paper will illustrate the organization, key concepts and best practices of the JHC. The suitability of a U.S. Joint Rotary-Wing Command will be explored based on an analysis of these findings and a study of several current operational shortfalls.

Rotary-Wing Challenges

In the face of nearly continuous force deployments required to support the current pace of the GWOT, the U.S. Army intends to double the size of its 160th Special Operations Air Regiment (S.O.A.R.) in an effort to meet the demands of its supported combatant command, SOCOM. SOF helicopters are rapidly becoming high-demand, low-density resources. This same theme is emerging in nearly every combatant AOR. High utilization rates and inefficient deployment of capabilities are exacerbating the problem. Where sufficient resources exist, current service doctrine frequently precludes the application of a capability-based approach to fulfilling regional combatant command requirements. In the context of joint-service providers, individual services identify capability requirements in a vacuum. Despite significant reorganization addressing how DoD employs and fights forces, there has been far too little joint emphasis on how we equip, train and deploy service assets to fight in a joint environment.

Too Few Helicopters

Two recent United States Central Command (USCENTCOM) unclassified joint lessons learned reports highlight the shortage of rotary-wing aircraft available to support the intra-theater medical evacuation (MEDEVAC) mission. The reports indicate a general shortage of Army rotary-wing lift, further exacerbated by navigation equipment shortfalls precluding the assignment of casualty evacuation (CASEVAC) capable platforms to the

dedicated Air Ambulance mission.[3] By the time the issue was nearing critical proportions, Army forces and equipment had been deployed to near exhaustion because the service-oriented approach to providing the required capability did not readily support looking for a solution beyond traditional roles.

Dedicated Air Ambulance is a U.S. Army task; however, the magnitude of the mission directed a non-standard solution. The near-term capability gap was assigned to the Navy. The Navy deployed forces and aircraft on time to meet the identified shortfalls, but there was substantial impact. Aircrews had to be identified and trained in excess of their typical readiness requirements. With limited training resources, Air Ambulance mission training frequently came at the expense of normal unit training in the parent squadrons. Additionally, naval helicopters required significant modification to meet theater and mission requirements. Half of the Navy's initial requirement was filled with fleet aircraft modified to support patient transfer equipment. However, the longer-range fix required a more dramatic solution. The Navy pulled brand-new production aircraft out of their programmed delivery cycle and made substantive modifications to install Aircraft Survivability Equipment (ASE) and patient transport equipment.[4]

In addition to equipment modifications, pilots, aircrewmen and corpsmen had to be identified and trained to a new mission set. The process was made significantly more difficult by the lack of appropriate joint doctrine, TTPs and qualification processes.

Too Many Helicopters

[3] Shirey, Eric. "Joint Aeromedical Evacuation: Why isn't it adequate for the battlefield." Unpublished Research Paper, Naval War College, Newport, RI: 2004, 10.
[4] Based on author's participation in several Navy Air Ambulance working groups established to evaluate resourcing, training and certification of naval helicopters and crews.

Removed from its political context, the military's rotary-wing response to hurricane Katrina was nothing short of extraordinary. Once the Warning Order was released, helicopter forces converged from across the country to lend support. Available ramp space became a premium as Navy, Army, Coast Guard, National Guard, Air Force, and Air National Guard forces arrived in the region. During the initial stages of the response, the airspace surrounding New Orleans was frequently choked with nearly one-hundred helicopters. There were drastically more assets in the operating area than the mission could support. Moreover, forces were deployed to assist, without due regard to their suitability to satisfy the operational capabilities required. Every service eagerly provided assets in a valiant attempt to ameliorate the suffering of storm victims. The result was disproportionate replication of capability, far in excess of the requirement. Moreover, the emergent deployment impacted current operations and force readiness, created considerable unscheduled maintenance, and had far reaching impact on the ability of parent commands to meet operational and readiness milestones in support of deployment schedules. Without an oversight mechanism to match required capability with available resources, the mission was grossly inefficient.

21st Century Seawolves

In Vietnam, a critical force shortfall was identified and helicopters were tasked to provide air cover to Game Warden forces operating riverine patrol craft in the Mekong Delta. U.S. Army pilots initially performed the mission flying UH-1B Huey gunships from naval afloat forward staging platforms.[5] At the same time, Navy pilots were identified and cross-trained in Army gunship tactics. Naval crews were indoctrinated in gunship tactics both during primary flight training CONUS and in-country, flying side-by-side with the Army

[5] Knott, Richard. Fire from the Sky: Seawolf Gunships in the Mekong Delta. Annapolis, MD: Naval Institute Press, 2005, 19.

counterparts. Navy pilots soon relieved their Army counterparts, but the Navy continued to operate Army aircraft considered best suited to the mission. Nearly twenty-years before Goldwater-Nichols, this example demonstrates the epitome of joint synergy. The Army and Navy shared personnel, equipment and tactics to develop the optimal mix of resources to meet the capability gap in Southern Vietnam.[6] The concept has already been combat tested and, similar to a modern Concept Plan, the basic concepts only require review and updating to current operational requirements. In 1967 the common platform was a UH-1 Huey. Today it is the H-60 'Joint' Hawk.

In *CNO Guidance 2006: Meeting the Challenge of a New Era*, the Chief of Naval Operations directed the development and deployment of riverine and naval expeditionary combat forces to meet the emerging challenges in the Global War on Terror.[7] Despite acknowledged requirement for dedicated airborne support, little has been done to identify the necessary capability or operational doctrine. In the absence of a unifying force advocate, individual services will likely compete to see who will (or will not) be assigned the Riverine Force Air Support mission. Is a single service best suited to provide the necessary mechanism to assign appropriate forces and synchronize development of applicable joint doctrine and TTPs, and if so, which one?

Humanitarian Assistance and Beyond

When ABRAHAM LINCOLN Carrier Strike Group (CSG-9) deployed in 2005, its air wing included a 'Bravo to Sea' proof of concept, embarking two naval helicopter squadrons aboard the aircraft carrier. This was a marked shift in the traditional strike oriented

[6] CDR Thomas Hayes, USN (Ret), interviewed by author, 15 October 2006.
[7] Mullen, ADM Mike. *CNO Guidance for 2006: Meeting the Challenge of a New Era*.GlobalSecurity.Org. http://www.globalsecurity.org/military/library/policy/navy/cno-guidance_2006.htm. (accessed 14 October 2006),

tactical approach that characterizes CSG presence. The force mix turned out to be dramatically better suited for the CSG's role in humanitarian relief efforts off the coast of Sumatra following the December tsunami. An optimal force mix, however, would have included more cargo-logistics capable helicopters.

A Joint Helicopter Command would provide the perspective to evaluate future deployments based on the required capabilities in the potential operating environment, not through the service-centric approach of picking assets based on organic forces and service tradition. A better mix of helicopters might include dedicated naval maritime dominance assets, combat logistics, and Army assault/special operations platforms, apportioned based on the capabilities required by the combatant commander. Developing the optimal force mix requires a holistic approach to capability selection not constrained by traditional deployment and service paradigms.

Operating concepts are not the only shortfall. Determining which individual capabilities are desired and where to find them only accomplishes a portion of the required task. Integration of operating doctrine, sustainability and interoperability must be addressed before the designated forces can be employed as effective instruments of military power. To support a case for deploying Army helicopters aboard Navy ships, the aircraft must be equipped and adapted to operate in a shipboard environment. Crews must be trained and certified. Helicopters must be outfitted with communications and navigation equipment compatible with Navy systems. Additionally, maintenance and support mechanisms must be adapted and scaled to function in an unsupported, expeditionary role.

The Army has previously demonstrated the versatility to deploy helicopters to Afloat Forward Staging Bases. Army 160th SOAR helicopters were successfully embarked aboard a

Navy frigate in Operation EARNEST WILL during the Tanker Wars in the late 1980s and again aboard USS KITTY HAWK during the opening phases of Operation ENDURING FREEDOM in 2001. However, these successes failed to provoke the institutionalization of enduring joint doctrine supporting force integration. At present, there is no one lens capable of focusing on all the attendant issues satisfactorily to achieve that goal.

Beyond Goldwater-Nichols

The Goldwater-Nichols Act was a necessary first step in the evolution of joint warfighting, but the journey cannot stop there. The *Beyond Goldwater-Nichols* Study Team (BG-N) was created by the Center for Strategic and International Studies (CSIS) to develop an "integrated set of practical and actionable recommended reforms for organizing both the U.S. military and national security apparatus to meet 21st century challenges."[8] The study group has produced a three-phased report identifying areas requiring more effort to achieve the tenets of jointness envisioned by the original Goldwater-Nichols Act and where transformation is necessary to address new security challenges. The Phase 1 report made the following observation, indicative of the enduring disconnect between traditional service paradigms and achieving a collaborative joint approach to sourcing capabilities:

> The first problem …is that there is no assured connection between the national military strategy and the formulation of military requirements…The issue is whether the platforms and weapons that are identified as new requirements are the most appropriate platforms and weapons to execute an integrated, unified military approach, not the approach of a single Service.[9]

The focus of the Phase 2 report is likewise indicative of the need to re-examine how the services have synchronized their individual roles within the joint context. Among

[8] Center for Strategic and International Studies. "Beyond Goldwater-Nichols: U.S. Government and Defense Reform for a New Strategic Era." CSIS.Org. http://www.csis.org/isp/bgn/. (accessed 18 October 2006).
[9] Ibid.

numerous issues, the scope of the investigation addressed: 21st Century capability requirements, regional and functional command structures, and new domains of warfare.[10]

The Need for Change

Evident in the military's response to nearly every joint operation from humanitarian assistance to direct combat action, traditional service structures and an individual approach to sourcing and deploying force capabilities handicap combatant commanders and lead to inefficient contribution of resources. By changing the way the military is organized to bring capabilities to bear in theater, the DoD can realize significant improvement in interoperable resource employment, streamlined resource procurement and support, and jointly developed warfighting doctrine.

Air maneuver over land, over water, and in the littoral is a critical enabling capability in both current and evolving U.S. doctrine. The combined and supporting arms approach to prosecuting objectives increasingly relies on the role of the helicopter to permeate boundaries and achieve the principal tenets of "From the Sea" operational concept. Individual service cultures have cultivated helicopter operating concepts that perpetuate intra-service relevance, but do not leverage the role of rotary-wing aviation in an integrated joint approach. The helicopter is ubiquitous, but its operational doctrine, operating and maintenance procedures are not. As part of the development and introduction of the Navy's new MH-60 aircraft, a dedicated effort was made to streamline existing H-60 Naval Air Training and Operating Procedures Standardization (NATOPS) manuals. In the process, the Navy discovered that there was significant divergence in procedures and standards reflecting the subtle differences in its intra-service communities. Despite a common airframe, differences were evident at

[10] Center for Strategic and International Studies. "Beyond Goldwater-Nichols: U.S. Government and Defense Reform for a New Strategic Era." CSIS.Org. http://www.csis.org/isp/bgn/. (accessed 18 October 2006).

every level of the manual, including different procedures for the same aircraft emergencies. When the Navy looked to the Army and Air Force for comparison, the results were even more discouraging. Each of the services had developed individual operational practices based on service-centric employment of the airframe, with no regard for the obvious synergy of a shared, joint approach to exploiting the commonality of the aircraft.[11] Flight qualifications, training, operating limits, maintenance requirements, every aspect of the respective helicopter communities had developed in parallel, disjointed isolation. For the level of interoperability displayed, each of the services may well have been operating completely different aircraft. Service-specific mission specialties, like the Navy's anti-submarine warfare (ASW) mission, of necessity direct specifically tailored 'graduate level' advanced system and tactics training. However, the requirement to provided service unique capabilities does not adequately repudiate the overwhelming operational efficiencies that can be realized in a holistic joint approach to doctrine, training and resourcing of helicopter forces.

[11] Based on author's personal experience during the Navy's MH-60S NATOPS manual development process and establishment of the initial MH-60S Weapons and Tactics Unit (WTU).

The United Kingdom's JHC: Demonstrated Proof of Concept

> *The Joint Helicopter Command will provide a unified command structure for the integration of battlefield helicopter and air assault combat, combat support and combat service support units. The principal focus of all Joint Helicopter Command activity is the delivery of effective battlefield and air assault combat power in support of operations. We will provide a coherent structure to ensure that the correct level of appropriately resourced, trained and sustained forces are available for employment by a Joint Commander in support of land, Special Forces or amphibious operations. To achieve this vision, we will need to provide an efficient joint approach to doctrine, structures, training support and working practices; harmonising* [sic] *these across the three Services. The Joint Helicopter Command seeks to build on the skills and knowledge of individuals as well as the strengths and traditions of the single Services in order to raise standards of safety and quality. It also seeks to forge strong links across the Command. In short, the Joint Helicopter Command will value the individual and maintain the ethos of the three Services, whilst focusing their joint capabilities to enhance the operational effectiveness of battlefield helicopter and air assault forces.*[12]

The British Joint Helicopter Command (JHC) was established in 1999 following recommendations documented in the 1998 Strategic Defence Review, published by the Ministry of Defence.[13] The concept proposed to align all British battlefield helicopters under the operational command of the JHC in order to focus and exploit joint capabilities and increase operational effectiveness. Recognizing the increasing pace of joint operations, the JHC's role is to identify and provide the most effective application of available assets.[14] Approximately 70% of British helicopters fall under control of the JHC, specifically those forces operating 'battlefield' helicopters in support of conventional army, amphibious and special forces. The remaining 30%, comprised of Royal Navy helicopters operating as integral elements to shipboard weapon systems, and non-combat Search and Rescue (SAR)

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[12] United Kingdom. National Audit Office, Report by the Comptroller and Auditor General. *Ministry of Defence: Battlefield Helicopters*. HC 486 Session 2003-2004: 7 April 2004, 14.
[13] Ibid, 6.
[14] "The Royal Air Force - News, Events and Current Operations." Joint Helicopter Command. Royal Air Force. <http://www.raf.mod.uk/news/archive/2000/jhc.html>. (accessed 05 Oct 2006).

elements of the Royal Air Force and Royal Navy remain under direct control of their parent service.[15] Operationally aligned with the largest component provider, the two-star JHC headquarters is co-located with and under the direct purview of the army's HQ Land Command.[16]

The primary functions were designed to facilitate greater operational flexibility, synchronization of standards, development of joint doctrine, coordination of flight training, and harmonization of maintenance and sustainability practices.[17] The JHC can draw upon equipment and personnel from each of the services to provide forces tailored to meet operational requirements. While the JHC is responsible for 'fighting' the force, the individual services retain authority for career management, administration, and personnel policy directives, as well as flight operation regulations and engineering standards.[18] Two recent reports provide critical evaluations of the JHC's success in achieving these concepts and make recommendations supporting additional courses of action. The first review was convened under direction of the National Audit Office by the Comptroller and Auditor General, in 2004. The second was ordered by the House of Commons Committee of Public Accounts, in 2005. Together, these reports provide an objective analysis of the Joint Helicopter Command's progress to date. For the purposes of this paper, only those issues with direct application to the development of a parallel U.S. organization will be examined. Three prominent areas presented themselves for more efficient exploitation in the British

[15] United Kingdom. National Audit Office, Report by the Comptroller and Auditor General. *Ministry of Defence: Battlefield Helicopters*. HC 486 Session 2003-2004: 7 April 2004, 12.
[16] "16 Air Assault Brigade." The JHC (Joint Helicopter Command). Royal Air Force. http://www.army.mod.uk/16_air_asslt_bde/command_control.htm, (accessed 05 Oct 2006).
[17] United Kingdom. National Audit Office, Report by the Comptroller and Auditor General. *Ministry of Defence: Battlefield Helicopters*. HC 486 Session 2003-2004: 7 April 2004, 18.
[18] Ibid, 18.

model: deployment, training, airworthiness and sustainment. The ensuing themes will establish issues critical to the development of a functional joint U.S. helicopter organization.

Deployment

A fundamental success of the JHC has been a marked reduction in the duplication of deployed capabilities characteristic of the services' tradition of independently deploying helicopters in support of operations. When British forces deployed independently to Bosnia in 1996, they cumulatively brought 28 more helicopters than the operation required, representing 40% in wasted duplication.[19] The JHC's oversight to assign and apportion forces as required to meet operational commitments has led to more efficient use of helicopter resources. Where individual services had previously been resigned to deploy forces to exhaustion, the JHC now provides an integrated method to filling combat requirements based on joint capability resourcing. Rather than waiting until aircrews and equipment reached their limits, the new organization and culture supports a joint approach to satisfying capabilities unrestrained by traditional service roles. In this manner, forces are deployed based on what they do, not exclusively on what color uniform they wear.

Training

The JHC's joint focus has also lead to tremendous savings and cultural evolution by consolidating primary flight training in a joint command. The Defence Helicopter Flying School been established to streamline a "tri-service" approach to combine basic rotary-wing flight training into one curriculum. Despite operating eleven different helicopters in the fleet, the reorganized training approach has found efficiencies by maximizing the amount of training accomplished in low-cost basic training helicopters, focusing on common core

[19] United Kingdom. National Audit Office, Report by the Comptroller and Auditor General. *Ministry of Defence: Battlefield Helicopters*. HC 486 Session 2003-2004: 7 April 2004, 6.

competencies and continuing to combine the best practices of the individual services into a coherent joint flight training system. In addition to the tangible results of reduced time-to-train and fiscal savings, there are more subtle effects as well. British students and instructors are indoctrinated in 'jointness' as a consequence of their participation in the joint training pipeline. This joint culture and interoperability is further enhanced by the recent addition of joint Crew Resource Management training.[20]

Airworthiness

Common airworthiness standards are another key target of the JHC. British services are governed by joint policies and regulations, however, the individual services had previously been free to develop their own interpretation and application of directives. Included in the British concept of 'airworthiness' are training requirements, operating procedures, maintenance procedures, safety practices, and technical directives. Traditional service operating procedures evolved and diverged based on unique operating environments. For example, training and regulations governing maritime operations necessarily varied from those associated with the overland environment. In early 2002, the JHC formed a Joint Air Regulations Team to review military flight regulations. It has since produced a common, tri-service manual promulgating a number of synchronized operating procedures.[21] A similar approach has been undertaken in the establishment of a single defense engineering training school. Initial training is conducted here before engineers progress to aircraft-specific training within their services.[22] Here, like in flight training, service members are exposed to

[20] United Kingdom. National Audit Office, Report by the Comptroller and Auditor General. *Ministry of Defence: Battlefield Helicopters*. HC 486 Session 2003-2004: 7 April 2004, 45.
[21] United Kingdom. House of Commons Committee of Public Accounts. *Ministry of Defence: Battlefield Helicopters*. HC 386, Session 2003–04, 18 March 2005, 20.
[22] Ibid, 21.

joint culture and learn interoperability concepts introduced in their initial experiences within the armed forces.

Sustainment

The United Kingdom's dedicated engineering, service and logistics support also fall under the umbrella of airworthiness. Here too, considerable effort is in work to achieve common combat service support and sustainability. This includes review of basic materiel readiness and combat readiness standards. The JHC's approach allows service support mechanisms to look beyond traditional barriers to find solutions. It provides a single conduit to transfer best practices from service to service and ultimately to remove unnecessary variation in operating procedures.[23] The effort to converge and integrate British military forces has prompted the creation of a common tri-service logistics support unit, the Defence Logistics Organization (DLO). One of its goals is to support a networked battlefield where commanders can view real-time equipment readiness status.

> To efficiently fulfill that vision, however, a nation's air force, army and navy not only need to be integrated in battle, but they also must use a common maintenance system. For example, if all forces use the same type of helicopter, all the aircraft should be managed as a single fleet, regardless of [service] ownership.[24]

As mentioned previously, the JHC operates eleven different helicopter types. However, the conceptual emphasis evidenced in this approach to solving airworthiness issues validates the enduring resolve of the JHC to achieve a joint solution.

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[23] United Kingdom. House of Commons Committee of Public Accounts. *Ministry of Defence: Battlefield Helicopters*. HC 386, Session 2003–04, 18 March 2005, 27.

[24] Burchell, Bill. "Deploying Convergent IT: The future of war fighting is going to depend, in large part, on linked, standardized IT systems, including those related to aircraft maintenance and availability." Overhaul & Maintenance, Vol X, Issue 4. 01 May 2004 49-56. https://webmail.nwc.navy.mil/exchweb/bin/redir.asp?URL=http://proquest.umi.com/pqdweb?did=639426681%26Fmt=3%26clientId=18762%26RQT=309%26VName=PQD>. (19 September 2006), 50.

Other Areas of Focus

The critical reviews also assessed the JHC's ability to address the issues of aircraft procurement, variance in unit rank structure and size, aircraft capability resourcing, and the applicability of non-commissioned officers in a range of flight roles. Ultimately, the conclusions and recommendations are germane to the establishment of a U.S. Joint Helicopter Command, however, full exploration is beyond the scope of this paper.

A Workable U.S. Solution

Helicopters are common to all service branches. Unlike ships or tanks, their commonality demands a joint approach to integration and deployment of rotary-wing capabilities, including development of common doctrine, organizational structures, training and support. The United Kingdom's Joint Helicopter Command presents a highly credible prototype. In a full exploration of the JHC, nearly every aspect of its approach and application can be directly linked to analogous U.S. institutions.

The JHC's creation targeted cultural and organizational barriers identical to those in the U.S. military. The most obvious dissimilarity is the size of the British military and the JHC's focused span of control reflecting the U.K.'s approach to joint-service war fighting. The JHC was created to consolidate control and integration of battlefield helicopters in support of overland operations. Based on this functional alignment, it nested well within the HQ Land component of the British Army. The sheer size and diversity of the U.S. military requires a more universal approach. To be effective, a proposed U.S. model should be applied unilaterally to all rotary-wing within DoD. The next logical step is to determine where this joint command would integrate in the U.S. unified command structure.

Where does it fit?

A proposed vision statement for the U.S. model, derived from the JHC might read:

> *The Joint Rotary-Wing Command (JRWC) will provide a unified command structure for the integration of all U.S. rotary-wing assets. The principal focus is to provide a coherent structure ensuring the correct level of appropriately resourced, trained and sustained forces available for Joint Commander employment to engage across the Range of Military Operations. To achieve this vision, the JRWC will develop an efficient joint approach to doctrine, structures, training support and working practices; synchronizing these across all the Services. The Joint Rotary-Wing Command will build on the skills and knowledge of individuals as well as the strengths and traditions of the single Services in order to raise standards of safety and quality. The JRWC will value the individual and maintain the ethos of the Services, while focusing their joint capabilities to enhance the operational effectiveness of all rotary-wing units in support of the Unified Command Plan.*[25]

Dissecting the principal tenets of this vision reveals direct parallels to the mission of U.S. Joint Forces Command (USJFCOM). Moreover, the fundamental tasks essential to creation of the JRWC fall squarely within the framework of USJFCOM's charter to be a joint force provider, integrator, and joint trainer, building joint forces that ensure elements of the Army, Navy, Air Force, and Marine Corps operate together as specialized, task-organized teams.[26] Establishment of the JRWC as a Sub-Unified Command under JFCOM aligns ideally within the JFCOM's functional ideology (Fig 1.).

[25] Author's revised JHC vision statement (page 11), edited to reflect potential adaptation to U.S. DoD.
[26] USJFCOM, "Transformation." *What is Transformation?* United States Joint Forces Command. <http://www.jfcom.mil/about/transform.html>. (accessed 21 Oct 2006).

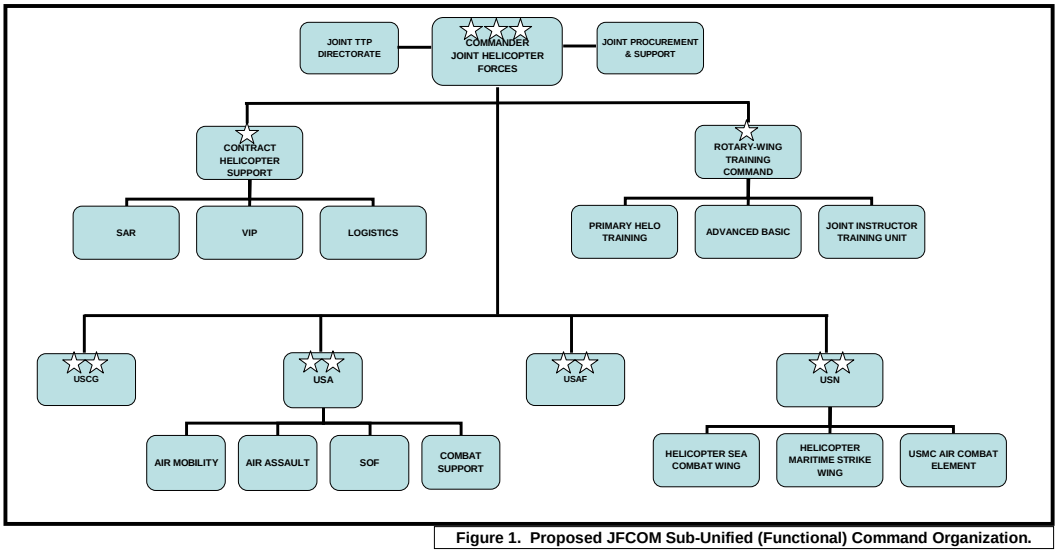

Figure 1. Proposed JFCOM Sub-Unified (Functional) Command Organization.

The JRWC concept nests well within JFCOM's priority to improve the way forces and capabilities are managed, and its focus on transformation:

> Within the United States military, transformation requires changing the form, or structure of our military forces; the nature of our military culture and doctrine supporting those forces; and streamlining our warfighting functions to more effectively meet the complexities of the new threats challenging our nation in the new millennium.
>
> Preparing for this new future will require the U.S. military to think differently and develop the kinds of forces and capabilities that can adapt quickly to new challenges and unexpected circumstances. [27]

Obstacles to Change

As Carl Builder illustrated in *The Masks of War*, service cultures present formidable opposition to change.[28] Goldwater-Nichols was not originally well received within the military services and lingering resistance remains. Further, the services have devoted considerable resources toward introspective processes designed to remove organic barriers and orient capabilities to support effects-based operations. The investments in these programs

[27] USJFCOM, "Transformation." *What is Transformation?* United States Joint Forces Command. <http://www.jfcom.mil/about/transform.html>. (accessed 21 Oct 2006).
[28] Builder, Carl H. The Masks of War. Baltimore: Hopkins University Press, 1989.

produce natural impediments to change. To legitimize service concerns, the JRWC must incorporate best practices from each service. Initiatives like the Navy's Naval Aviation Enterprise (NAE) will not be wasted, but instead will become the cornerstone of the JRWC's approach and institutionalized in its core culture.

The U.S. military is larger and more complicated in force and composition than the British Ministry of Defence. However, it benefits from the advantage of technical superiority and a robust commercial-military enterprise. As the Navy has demonstrated through the Helicopter CONOPS, a common platform can allow available technology to be leveraged as a force multiplier. Based on the H-60 aircraft, the Navy is using plug-and-play technology and common cockpit avionics systems to develop two highly tailorable versions of the same platform. Mission sets and capability can be swapped to adapt to changing operational requirements. The spiral development program intrinsic to the Navy's procurement of the new MH-60 aircraft ensures the capacity to incorporate emerging technologies as those systems become available. As a result, the Navy is rapidly streamlining its helicopter force around a common MH-60 airframe and reducing the interoperability and divergent support issues inherent to a fleet of various iterations of H-60, H-3, H-53, H-1 and H-46 aircraft. Despite eliminating the variety of platforms, the Navy's consolidated helicopter force capability far surpasses the combined capability it replaced. Moreover, there are tremendous economies in training and support to be realized based on a common platform. Pilots, aircrew and maintenance personnel are all trained to operate and support the MH-60. The force sustainment mechanism is similarly consolidated. Parallel programs are underway within each service. Under the JRWC, the lessons derived from an individual service can be

immediately transferred service-to-service. The JRWC also provides the capacity to immediately socialize and leverage a joint approach to resolving rotary-wing issues.

Conclusion

The rapidly changing complexion of modern warfare persistently requires the military to engage across the full spectrum of military operations. In the absence of centralized control and oversight of the military's ubiquitous helicopter forces, services are disposed to apply singularly-focused solutions to combatant commanders' requests for forces. The Joint Rotary-Wing Command concept provides a mechanism to achieve a joint approach to capability resourcing. It has the potential to effectively remove the barriers which drive service component managers to limit their concentration within parochial service Mission Essential Task List (METL).

The JRWC would allow a joint helicopter community to direct efforts in the context of Universal Joint Task List (UJTL) capabilities in order to efficiently field operational capabilities to meet combatant commanders' requirements. Current joint doctrine demands:

> The institutionalization of a pervasive "expeditionary and joint team mindset" in the Services … essential to the successful implementation of Joint Warfare and Crisis Resolution in the 21st Century. This mindset must permeate all aspects of future joint and Service force design, doctrine, capabilities, organization, training, equipment, deployment, employment, and sustainment. This amounts to nothing less that a cultural change that is essential to a more effective and coherent joint force.[29]

The JRWC concept enables a joint helicopter approach to capabilities resourcing, efficient deployment, and development of enduring doctrine. Effective delivery of capability requires

[29] Pace, GEN Peter. The Joint Staff. Joint Requirements Oversight Council. *An Evolving Joint Perspective: US Joint Warfare and Crisis Resolution in the 21st Century*. Washington, DC: GPO, 2003, 11.

that the right mix of helicopter force arrives at the right location, at the right time, ready to exercise the right tools to win the fight. It demands that sound joint operating doctrine supports the integrated application of resources.

The Joint Rotary-Wing Command concept answers that challenge.

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